### (19) World Intellectual Property Organization

International Bureau



## 

(43) International Publication Date 12 May 2005 (12.05.2005)

**PCT** 

# (10) International Publication Number WO 2005/042231 A1

(51) International Patent Classification<sup>7</sup>: 33/30

**B29C 49/48**,

(21) International Application Number:

PCT/BR2003/000156

(22) International Filing Date:

4 November 2003 (04.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): SINCRO PET COMÉRCIO E SERVICOS LTDA. [BR/BR]; Rua Santa Terezinha, 381, Vila Socorro, 04762-020 São Paulo, SP (BR).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): NONOGAKI, Osmar, K. [BR/BR]; Av. Nossa Senhora do Sabará, 385, 04685-000 São Paulo, SP (BR).

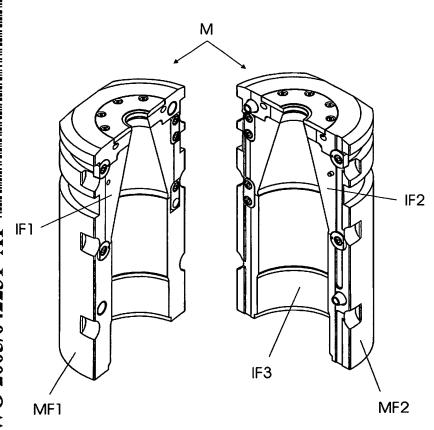
- (74) Agent: CRUZEIRO/NEWMARC PATENTES E MAR-CAS LTDA.; Rua Itajobi, 79, Pacaembu, CEP-01246-010 São Paulo, SP (BR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

[Continued on next page]

(54) Title: BLOW MOLD SHELL WITH VOLUME INSERT SYSTEM FOR A BLOWING MACHINE



(57) Abstract: The present invention describes a blow mold shell (M) of tubular shape, divided in both the longitudinal and transversal direction into individual parts (Ml, M2, M3, M4, M5, M6) or divided in the longitudinal direction into individual parts (MF1 and MF2), each one of said parts featuring a cylindrical shell shape; parts (MI), (M3) and (M5) are supplementary, as well as parts (M2), (M4) and (M6); the supplementary parts are attached to each other by means of screws (P1); on the longitudinal ends of the supplementary parts there are calibrated grooves (El and E2) of rectangular profile which purpose is to ensure the alignment in the longitudinal axis; on parts (MF1) and (MF2) there are calibrated grooves onto which are assembled the form inserts (IF1, IF2 and IF3) also calibrated; between the supplementary parts of mold (M) there is a locking device made up of pegs (C, CF and CR), which are hidden inside cavities featured on mold parts (M) and attached to it by means of screws (P2 and P3); said locking device is responsible for preventing rotation between said parts as well as allowing its removal or replacement.

### 

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.